



Building and Development Dispute Resolution Committees—Decision

Sustainable Planning Act 2009

Appeal Number:	38 - 12
Applicant:	Southport Flying Club (Inc)
Assessment Manager:	Queensland Building Approvals – Building Certifier - Darren Wright
Referral Agency : (if applicable)	Queensland Fire and Rescue Service
Site Address:	428 Pine Ridge Road, Coombabah QLD 4216 and described as Lot 21 on RP 883601 – the subject site

Appeal

Appeal under section 532 of the *Sustainable Planning Act 2009* (SPA) by the Southport Flying Club against the Interim Certificate of Classification issued by Queensland Building Approvals as the Assessment Manager. The Appeal by the Southport Flying Club is on the grounds that:-

- a) The Queensland Fire and Rescue Service (QFRS) as the Referral Agency initially assessed the fire hydrant system design as compliant with a single pump.
 - b) The Assessment Manager issued a Development Application Decision Notice - Approval certifying the fire hydrant system design as compliant with a single pump.
 - c) The fire hydrant system has been installed in accordance with the approved design with a single pump.
 - d) The QFRS inspected and assessed the fire hydrant system installation as non-compliant with a single pump.
 - e) The Assessment Manager has issued an Interim Certificate of Classification limiting occupation of the relevant building until 15 February 2013.
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Date of hearing:	3 October 2012
Place of hearing:	The subject site
Committee:	David Mansell – Chair
Present:	Neville Aitkenhead – Applicant Steven Rance – Applicant Neville Kay – Applicant Darren Wright – Assessment Manager Paul Settree – QRFS David Brazel – QFRS Neil Dansie - QFRS Ben Smith – Dennis Cairns and Associates – Hydraulic Consultant

Decision:

The Building and Development Dispute Resolution Committee (Committee) in accordance with section 564(2)(b) of the SPA **changes the decision** and makes the following directions:-

Within 20 business days of this decision taking effect, the Assessment Manager must amend the Form 11 dated 18 July 2012 currently issued as an 'Interim' Certificate of Classification and re-issue the Form 11 as a Certificate of Classification without limiting the period for which the building may be occupied.

Background

Based on information made available, the background to this appeal can be summarised as follows;

- On or about 20 October 2010, the Queensland Fire and Rescue Service (QFRS) were sent an application as a Referral (advice) Agency under the SPA for the assessment of special fire services. Discussions ensued between the QFRS and the relevant parties. The QFRS referral agency application was subsequently put on hold pending a revised fire hydrant system design.
- On or about 20 July 2011, the QFRS were referred a revised fire hydrant system design incorporating a new water storage facility (tank) and a single on-site pumpset.
- On 30 August 2011 the QFRS issued a compliant assessment report stating the revised fire hydrant system design incorporating a new tank and a single on-site pumpset as 'compliant'.
- On 1 September 2011 the Assessment Manager issued a Decision Notice of approval.
- On or about 19 June 2012 discussion was held between the QFRS (Ken Clark) and the Assessment Manager regarding the need for a second pump on the site following a preliminary inspection by QFRS.
- Between 19 June 2012 and 29 June 2012 emails were exchanged between the Assessment Manager and the QFRS discussing whether a second pump is required.
- On or about 26 June 2012 a further discussion was held between the QFRS and the Assessment Manager regarding the need for a second pump.
- On 17 July 2012 the QFRS issued a non-compliant inspection report listing the Fire Mains (including booster and/or pumps) as 'non-compliant'. The QFRS report advises that the QFRS will accept the building being occupied as is with a single pump for approximately 6 months. Furthermore the QFRS report advises;-

'The reason for the non-complying inspection advice is the number of pumps provided for the hydrant system. It is acknowledged that at the time of assessment a single pump was accepted by the QFRS. Since then however, after further consideration it is the stance of the QFRS that a second pump is required to comply with AS249.1-2005.'

'It is the opinion of the QFRS that the supply line connected to the tank does not fit the description of a reticulated supply and that the hydrant system is to be viewed as being fed from the static tank supply exclusively.'

- On 18 July 2012 a Form 11 - Interim Certificate of Classification was issued limiting occupation of the relevant building until 15 February 2013.
- On 14 August 2012 a Form 10 – Application for Appeal was received by the Committees Registrar.

Material Considered

The material considered in arriving at this decision comprises:

1. Australian Standard AS2419.1-2005.
2. QFRS Compliant Design Assessment Report dated 30 August 2011 signed by Paul Settree.
3. Development Application Decision Notice of approval dated 1 September 2011 and associated approved plans H01/B3, H02/B7, H03/B4, H04/B4 by Dennis Cairns and Associates (Project No. 10193) dated November 2010.
4. Email dated 19 June 2012 from the Assessment Manager to the QFRS.
5. Email dated 26 June 2012 from the Assessment Manager to the QFRS.
6. Email dated 29 June 2012 from the QFRS (David Brazel) to the Building Certifier.
7. QFRS Non-Compliant Inspection Report dated 17 July 2012.
8. Form 11 - Interim Certificate of Classification by the Assessment Manager dated 18 July 2012.
9. 'Form 10 – Appeal Notice', grounds for appeal and correspondence accompanying the appeal lodged with the Committees Registrar on 14 August 2012.
10. Email dated 25 September 2012 from the Assessment Manager to the Committee.
11. Statement of Assessment Manager dated 25 September 2012.
12. QFRS Submission dated 2 October 2012.

Findings of Fact

The Committee makes the following findings of fact:

1. The QFRS Compliant Design Assessment Report lists the relevant building details as being;-
 - Class 7b
 - Floor Area 2408m²
 - Size of Largest Fire Compartment: 1901m²
 - Effective Height: 0
 - Rise in Storeys: 1
 - BCA Year: 2010
2. The Assessment Manager and QFRS agree that the fire hydrant system has been installed in accordance with the design initially advised as compliant by the QFRS on 30 August 2011 and as subsequently approved by the Assessment Manager on 1 September 2011.
3. The approved hydraulic plan H02/B7 indicates that a single on-site pumpset is connected to 2 x 145,000 litre water storage tanks that are capable of providing the complete fire hydrant system water supply of 20 litres per second for 4 hours. The tanks are connected to the reticulated water supply by a 40mm diameter fill line or top up facility. The tanks are distant from the reticulated water supply with the 40mm diameter fill line running an estimated distance of 600m.
4. The Assessment Manager considers the installed fire hydrant system to comply with AS2419.1-2005 but has given regard to the QFRS advice and subsequently issued a Form 11 – Interim Certification of Classification to permit occupation until 15 February 2013. Except for the fire hydrant system matter raised by the QFRS, the Assessment Manager is otherwise satisfied that the building is substantially completed in accordance with Section 101 of the Building Act.

5. The relevant section of AS2419.1-2005 in contention is Section 6.2(d) and is stated as follows;-

'On-site pumpsets provided to achieve the hydrant flow and pressure requirements of this Standard shall comprise -

(a)

(b)

(c)

(d) If connected to a reticulated water supply and installed in a building not greater than 25m in effective height, one pump driven by'

6. AS2419.1-2005 does not contain a definition for the word 'connected' nor for the term 'reticulated water supply'. The QFRS state in their submission -

'The QFRS believes a reticulated water supply is achieved from a network of pipes and provided by a water utility that will supply uninterrupted water at a positive pressure.'

The Victorian Country Fire Authority defines 'reticulated water supply' as;-

'....permanent infrastructure provided to deliver water to lots from a water supply external to the general vicinity of the subdivision. Water is provided under pressure.'

7. The crux of the dispute relates to what constitutes being 'connected' for the purposes of Section 6.2(d) of AS2419.1-2005.

8. The Assessment Manager contends that the pump is 'connected' to the reticulated water supply as required by Section 6.2(d) of AS2419.1-2005. Evidence to support this position is given by the fact that the water running through the pump is initially sourced from the reticulated water supply e.g. if sufficient red dye is placed in the reticulated water supply, water with red dye will run through the pump. The water supply authority (Council) would consider the property connected to the reticulated water supply and therefore are entitled to charge for the use of the water used (although the term connected by the Council has no regard to AS2419.1-2005 and the context of the word 'connected' that is used in Section 6.2(d)).

9. The QFRS contend that the intent of AS2419.1-2005 in regard to connecting the on-site pump to the reticulated water supply is to provide a level of redundancy and safety margin should the fixed pumpset fail. In the event that a fixed on-site pumpset fails, the QFRS contend that a direct connection to the town main is intended to provide a minimal level of water supply to assist fire-fighters to exit from the immediate position they're in to a point of safety. The assumption here is that by connecting the pump to the town main unassisted fire hydrant outlets will have a level of pressure and flow that is significantly greater than what can be achieved at unassisted fire hydrant outlets by the on-site water storage tank facility. That assumption is invalid for the subject site.

10. The QFRS (David Brazel) stated at the hearing that the QFRS would determine the fire hydrant system to only require a single pump if the 40mm diameter water supply off the town mains was connected directly to the pump. The QFRS indicated that this would not be an ideal outcome for QFRS operations but would be considered an AS2419.1-2005 deemed to satisfy compliant solution.

11. In the instance of pump failure and the instance of a 40mm diameter water supply off the town mains being connected directly to the pump, the friction loss within a 600m run of 40mm diameter pipe is likely to result in a pressure and flow at the fire hydrant outlets that is comparable to the unassisted pressure and flow that will be given by the onsite water tank storage facility. Therefore connecting the pump directly to the town main rather than via the tank is not considered to significantly enhance QFRS operations.

12. For the purposes of connecting the pump to the reticulated water supply as required by Section 6.2(d), AS2419.1-2005 does not prescribe minimum pipe sizes or pressure and flow requirements for the pump to be deemed connected. For larger or more hazardous buildings it may be valid to

determine that a 40mm diameter pipe is insufficient for the pump to constitute being considered connected to the reticulated water supply.

Reasons for the Decision

Regard To Literal Interpretation

Having regard to the literal interpretation of Section 6.2(d) of AS2419.1-2005, it is reasonable to determine that the pump is connected to the reticulated water supply for this specific site. The ability of the pump to use water initially sourced from the reticulated water supply is evidence of some form of connection. The pump is connected to the reticulated water supply by a continuous range of conduit sizes commencing off the town main with a 40mm conduit, transferring to a 5.4m conduit (tank) and in turn a 100mm conduit to the pump.

Regard To Intent

The QFRS interpretation of Section 6.2(d) has a high regard to the Section's intent. The QFRS' opinion on the intent of Section 6.2(d) is confirmed as being reasonable. To alter the existing fire hydrant system to what the QFRS considers a compliant deemed to satisfy solution, by connecting the pump directly to the 40mm water supply line that connects to the town mains, will not significantly enhance QFRS operations or safety for this particular property and scenario. There may be other scenarios where a higher regard to the intent of Section 6.2(d) would result in a fire hydrant system design that is dissimilar to the subject site.

The QFRS have advised that the building may be occupied as an interim measure for a period of approximately 6 months which indicates that the QFRS have determined that the installed fire hydrant system is safe and operationally suitable for this period of time. The QFRS submission dated 2 October 2012 includes a commonly heard QFRS statement as follows;-

'The QFRS has a strong culture based upon workplace safety and work with the mantra of Zero Harm.'

It is reasonable to conclude after having due regard to the nature and characteristics of the relevant building, the subject site, and having due regard to the intent and literal meaning of Section 6.2(d) of AS2419.1, that the single on-site pumpset for this particular building can be considered connected to the reticulated water supply.

David Mansell
Building and Development Committee Chair
Date: 7 December 2012

Appeal Rights

Section 479 of the *Sustainable Planning Act 2009* provides that a party to a proceeding decided by a Committee may appeal to the Planning and Environment Court against the Committee's decision, but only on the ground:

- (a) of error or mistake in law on the part of the Committee or
- (b) that the Committee had no jurisdiction to make the decision or exceeded its jurisdiction in making the decision.

The appeal must be started within 20 business days after the day notice of the Committee's decision is given to the party.

Enquiries

All correspondence should be addressed to:

The Registrar of Building and Development Dispute Resolution Committees
Building Codes Queensland
Department of Housing and Public Works
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Brisbane QLD 4001
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